AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claims 1-13 (cancelled without prejudice)

Claim 14 (original) A method for the manufacture of a catalyst for the production of carbon fibrils comprising the steps of:

(a) forming an aqueous solution of an iron compound or iron and molybdenum compounds;

(b) forming a slurry of catalyst support particles comprising alumina and/or magnesia particles;

(c) precipitating an iron compund or iron and molybdenum compounds onto said alumina and/or magnesia particles in the presence of an effective yield-enhancing amount of a carboxylate; and

(d) separating the so-impregnated support material from said slurry and further processing it to produce a supported fibril-forming catalyst.

Claim 15 (original) A method as recited in claim 14 wherein the precipitated catalyst is washed with a solution of a carboxylate prior to further processing to produce said fibril-forming catalyst.

Claim 16 (original) A method as recited in claim 14 wherein said carboxylate is introduced into the slurry of support material prior to introduction of the solution containing said iron compound or said iron and molybdenum compounds.

Claim 17 (original) A method as recited in claim 14 wherein the carboxylate comprises an anion of a carboxylic acid and the solution from which the iron compound or the iron and

molybdenum compounds are precipitated onto said alumina and/or magnesia particles contains from about 0.04 to about 4 grams of the anion per gram of supported fibril-forming catalyst.

Claim 18 (original) A method as recited in claim 14 wherein the said carboxylate is derived from formic acid or acetic acid.

Claim 19 (original) A method as recited in claim 14 wherein the carboxylate comprises an anion of a carboxylic acid and the weight ratio of anion to iron or iron and molybdenum in the solution from which the iron compound or iron and molybdenum compounds is precipitated is in the range of 0.07 to 14.

Claim 20 (original) A method as recited in claim 14 wherein the carboxylate is acetic acid, the fibril-forming metal compound includes an iron compound and the weight ratio of acetate to iron in the solution from which an iron compound is precipitated is in the range of 0.1 to 5.

Claims 21-29 (cancelled without prejudice)

Claim 30 (original) A method of making a fibril-forming catalyst comprising the steps of:

(a) forming an aqueous mixture comprising:

(i) an aqueous solution of a compound of a metal having fibril-forming catalytic properties and a compound of aluminum and/or magnesium and

(ii) a slurry of an aggregate of carbon fibrils, a preponderance of said fibrils having a length to diameter ratio of at least five, an external diameter of from 3.5 to 75 nanometers and a wall thickness of 0.1 to 0.4 times the said external diameter, said fibrils having graphitic layers substantially parallel to the fibril axis and being substantially free of pyrolytically deposited carbon;

(b) coprecipitating a compound of the fibril-forming metal and an aluminum and/or magnesium compound onto the fibril aggregate; and

(c) further processing the coprecipitated material to form a supported fibril-forming catalyst.

Claim 31 (original) A method as recited in claim 30 wherein said aqueous solution contains from about 0.01 to about 1 gram of iron, from about 0.005 to about 0.25 gram of molybdenum and from about 0.01 to about 1 gram of aluminum and/or magnesium per gram of fibril-forming catalyst and said slurry contains from about 0.01 to about 0.9 gram of aggregates per gram of supported fibril-forming catalyst.

Claim 32 (original) A carbon fibril-forming catalyst prepared by the steps of:

(a) forming an aqueous mixture comprising

(i) an aqueous solution of an iron compound or iron and molybdenum compounds and an aluminum and/or magnesium compound and

(ii) a slurry of an aggregate of carbon fibrils, a preponderance of said fibrils having a length to diameter ratio of at least five, an external diameter of from 3.5 to 75 nanometers and a wall thickness of 0.1 to 0.4 times the said external diameter, said fibrils having graphitic layers substantially parallel to the fibril axis and being substantially free of pyrolytically deposited carbon,

(b) coprecipitating an aluminum and/or magnesium compound and an iron compound or iron and molybdenum compounds onto the fibril aggregate; and

(c) further processing the coprecipitated material to form a supported fibril-forming catalyst.

Claim 33-34 (cancelled without prejudice)

Claim 35 (original) A method of making a fibril-forming catalyst comprising the steps of:

(a) forming an aqueous solution of a compound of a metal having fibril-forming catalytic properties;

(b) forming a slurry of magnesia particles and aggregates of carbon fibrils, a preponderance of said fibrils having a length to diameter ration of at least five, an external diameter of from 3.5 to 75 nanometers and a wall thickness of 0.1 to 0.4 times the said external diameter, said fibrils having graphitic layers substantially parallel to the fibril axis and being substantially free to pyrolytically deposited carbon;

(c) adding the aqueous solution and the slurry together and thereby incorporating a compound of the fibril-forming metal onto said magnesia particles in said fibril aggregates; and

(d) further processing the precipitated material to form a supported fibril-forming catalyst.

Claim 36 (original) A method as recited in claim 35 wherein said aqueous solution contains from about 0.01 to about 1 gram of iron and from about 0.005 to about 0.25 gram of molybdenum per gram of fibril-forming catalyst and said slurry contains from about 0.01 to about 1 gram of magnesia and from about 0.01 to about 0.9 gram of aggregates per gram of supported fibril-forming catalyst.

Claim 37 (original) A method as recited in claim 35 wherein the precipitated material is treated with a carboxylate before further processing.

Claim 38 (original) A carbon fibril-forming catalyst prepared by the steps of:

(a) forming an aqueous solution of an iron compound or iron and molybdenum compounds;

(b) forming a slurry of magnesia particles and aggregates of carbon fibrils, a preponderance of said fibrils having a length to diameter ratio of at least five, an external diameter of from 3.5 to 75 nanometers and a wall thickness of 0.1 to 0.4 times the said external diameter, said fibrils having graphitic layers substantially parallel to the fibril axis and being substantially free of pyrolytically deposited carbon;

(c) adding the aqueous solution and the slurry together and thereby incorporating an iron compound or iron and molybdenum compounds onto said magnesia particles in said fibril aggregates; and

(d) further processing the precipitated material to form a supported fibril-forming catalyst.

Claim 39 (original) A catalyst as recited in claim 38 wherein the precipitated material is treated with a carboxylate before further processing.

Claims 40-73 (cancelled without prejudice)